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| 10/558,892 | 12/01/2005 | Gianfranco Bidola | 41027/AJ/cd | 6085 |
| 7590 Modiano & Associati Via Meravigli 16 Milano, 20123 ITALY | | | EXAMINER SOOHOO, TONY GLEN | |
| | | | ART UNIT 1797 | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/558,892

Applicant(s)

BIDOIA, GIANFRANCO

Examiner

Tony G. Soohoo

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-56 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 12-1-2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP04/06323 filed on 06/1/2004.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of ;

- a. 1) the "slot has passages for outflow of the air and gas" of claim 36,
- b. 2) the two studs of claim 44,
- c. 3) the motor of claim 47,

must be shown/labeled or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Claims 29, 31, 33, 34, 44, 45, objected to because of the following informalities: The claims are inconsistent in naming the "rotation pivot" and "said rotation pivot" established in claim 29, and 31, The depending claims later state "pivot".. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 29-56 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 29 (third to the last one of the claim) states "said *means* being actuable ". The claim recites "valve means", "suction means", "rotation means" and "means for the translational motion of said rotation pivot together with said piston". It is unclear which means is being referred to by "said *means* being actuable ".

Claim 33, 34, 44, 45 recites the limitation "said pivot" or "the pivot" (for examination purposes, the element is read as being "rotation pivot"). There is insufficient antecedent basis for this limitation in the claim.

Claim 44 recites the limitation "the lateral surface of the first shank" in line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 50 lacks antecedent basis for "said distribution channel".

Claim 52 lacks antecedent basis for "said perimetric tab".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 29, 36, 37, 50 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by SOLOMON 5842786.

The reference to SOLOMON discloses a mixing and bone cement device including a box body 12, receptacle 14, lid 34, outlet distribution channel 21 which is an extension nozzle of a syringe needle type where it is controlled with a valve plug means 22, a vent channel 72, mixing means generally 29, 31, 45, 46, with elongated blades segments 46, piston 36 with slots 86, a rotation pivot shaft 60 may slide through the

hole 63 of the lid, a rotation means 59 that can be operated by a user during mixing of the paste; the device further having a handgrip 84 (fig 7) for a single hand of the user; means (88) for the translational motion of said rotation pivot shaft 60 together with said piston 36 toward the bottom of said receptacle 14; said means 88 being actuatable with the same hand associated with said handgrip 84. (claims 29, 50, 53)

Regarding claims 36 and 37, note that the arrangement of the blade to the slots, provides an arrangement with slots between the blades 46 to allow outflow of air and gas from the mixing chamber toward the venting chamber, the total of the blade segments 46 extends as a blade along the length of the receptacle.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 35 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over SOLOMON 5842786.

The Solomon reference discloses all of the claimed subject matter as discussed above. Regarding claim 35, the Solomon reference does not disclose the head of the blade wider than the slot width (claim 35). Absent any unexpected result, it would have been an obvious matter of design choice to change the size of the blade width at the top head end so it would not fall out of

the piston slot, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Regarding claim 54, the Solomon reference does not disclose the device is made with plastic material. (claim 54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to made the device with plastic material for lower cost and ease of manufacture, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

9. Claims 34, 44-48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over SOLOMON 5842786 in view of BURCHETT 6536937.

The Solomon reference discloses all of the claimed subject matter as discussed above. The Solomon reference does not disclose a C-shaped part to couple the rotational pivot shaft 60 within bulges to be used for coupling during the mixing operation of the paste (claim 34) or having locking means formed from two studs to protrude from the 1st shank of the pivot shaft (claim 44). Solomon utilizes a cotter pin to attach the shaft 60.

The reference to Burchett teaches that one may attach an agitator with a drive shaft using a E-clip (an e-clip encompasses a C-clip with an additional prong in the center). The clip forms two outer studs and a center stud in the E-clip. Whereas Burchett teaches the an alternate attachment method, a person having ordinary skill in the art would have found it obvious to substitute for one connection method (cotter pin) with another functionally equivalent connection method, in this case a E-clip / C-clip arrangement, so as to provide a more cost expedient construction material element while providing the same function. (claims 34, 44)

Solomon discloses the use of use of a crank, or an electric or pneumatic drill as a rotational source at the free end of the pivot shaft. (claim 45-47). Solomon shows a gasket pocket 41 for a gasket 40 proximate the rotational pivot shaft first shank 60. (claim 48).

Regarding claim 51, the Solomon reference fails to disclose a stand. The Burchett reference teaches that a housing may be provided to hold the mixing chamber and additionally provide a manner to house the vacuum source. In view of the showing of the Burchett reference it would have been obvious to a person having ordinary skill in the art to provide for the Solomon device with a stand housing and enclosed vacuum source to provide a convenient manner to provide the suction to the vent and additionally hold the mixing chamber during the preparation of the paste.

Allowable Subject Matter

10. Claims 30-33, 38-43, 49, 52, 55-56 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 8AM-5PM, Tues-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tony G Soohoo/
Primary Examiner, Art Unit 1797

Tony G Soohoo
Primary Examiner
Art Unit 1797